

## Claims:

1. A process for generating  $^1\text{O}_2$  which comprises treating an Sn(II) salt of the formula



in which X is an anion from the group consisting of trifluoromethanesulfonate, acetate, formate, oxalate, lactate, malonate, malate, tartrate, citrate, orthophosphate, sulfate, chloride, perchlorate and n is 1 or 2, in an organic solvent at a temperature of from  $-80^\circ\text{C}$  to  $20^\circ\text{C}$  with 1 to 2 mol of ozone per mole of tin compound, and using the  $^1\text{O}_2$  which forms directly for the oxidation of organic substrates which react with  $^1\text{O}_2$ .

2. The process as claimed in claim 1, wherein the Sn(II) salt used is tin(II) trifluoromethanesulfonate or tin(II) acetate.
3. The process as claimed in claim 1, wherein the organic solvent used is ethyl acetate, butyl acetate, methanol, ethanol, dichloromethane or acetic acid.
4. The process as claimed in claim 1, wherein the reaction temperature is  $-80$  to  $-5^\circ\text{C}$ .
5. The process as claimed in claim 1, wherein one equivalent of ozone is used.
6. The process as claimed in claim 1, wherein a solution of an organic substrate which reacts with  $^1\text{O}_2$  is metered in during the reaction of the Sn(II) salt with ozone.
7. The process as claimed in claim 1, wherein a solution of an organic substrate which reacts with  $^1\text{O}_2$  is metered in after the reaction of the Sn(II) salt with ozone, following removal of any excess ozone.

8. The process as claimed in claim 6 or 7, wherein the solvent used for the substrate is ethyl acetate, butyl acetate, methanol, ethanol, dichloromethane or acetic acid.